AMENDMENTS TO CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method for removing image artifacts from a representation of an image, comprising the steps of:

(a) obtaining a pixel representation of the image;

(b) classifying each pixel in the image as a screen or non-screen pixel, wherein a screen pixel is defined as a pixel that is part of a predetermined periodic pattern;

(c) examining pixels in a predetermined surrounding area of each pixel to check the classification of that pixel as determined in step (b) by applying a two-dimensional mask that is divided into a plurality of quadrants, the center of the two-dimensional mask being common to each of the quadrants; and

(d) selectively applying a low pass filter to pixels in the image, such that, when the low pass filter is applied, a center of the low pass filter is selectively shifted relative to a current pixel based on which of the plurality of quadrants in the two-dimensional mask contains screen pixels as determined in the examining in step (c).

2. (Previously Presented) The method of claim 1, wherein the classifying step (b) comprises applying a mask that is divided into overlapping areas with the center of the mask being common to each of the areas, the mask being applied such that it is centered on the pixel being classified to determine if the center pixel is part of the predetermined periodic pattern.

3. (Canceled)

4. (Previously Presented) The method of claim 1, wherein, in the examining step (c), the two-dimensional mask is applied such that it is centered on the pixel being checked.

5. (Canceled)

6. (Original) The method of claim 2, wherein the predetermined periodic pattern is a periodic line or dot pattern having a period of 2 or 3.

7. (Canceled)

8. (Original) The method of claim 1, further comprising the steps of:

(f) determining a feature indicator for at least one portion of the image; and

(g) adaptively sharpening or softening the at least one portion of the image based on the determined feature indicator.

9. (Currently Amended) An apparatus for removing image artifacts from a representation of an image, the apparatus comprising:

a device for obtaining a pixel representation of the image;

a screen pixel identifier, in communication with the device, for classifying each pixel in the image as a screen or non-screen pixel, wherein a screen pixel is defined as a pixel that is part of a predetermined periodic pattern;

a screen region verifier, in communication with the screen pixel identifier, that includes a two-dimensional mask divided into a plurality of quadrants, the center of the two-dimensional mask being common to each of the quadrants, for examining pixels in a predetermined surrounding area of each pixel to check the classification of that pixel as determined by the screen pixel identifier; and

a low pass filter, in communication with the screen region verifier, that is selectively applied to pixels in the image, such that, when the low pass filter is applied, a center of the low pass filter is selectively shifted relative to a current pixel based on <u>which of the plurality of quadrants in the two-dimensional mask contains screen pixels as determined in</u> the examining <u>operation</u>.

10. (Previously Presented) The apparatus of claim 9, wherein the screen pixel identifier comprises a mask that is divided into overlapping areas with the center of the mask being common to each of the areas and that is applied by centering the mask on the pixel being classified to determine if the center pixel is part of the predetermined periodic pattern.

11. (Canceled)

12. (Previously Presented) The apparatus of claim 9, wherein the two-dimensional mask is applied by centering it on the pixel being checked.

13.   (Canceled)

14. (Original) The apparatus of claim 10, wherein the predetermined periodic pattern is a periodic line or dot pattern having a period of 2 or 3.

15. (Canceled)

16. (Original) The apparatus of claim 9, further comprising:

a frequency classifier that determines a feature indicator for at least one portion of the image; and

an image processor for adaptively sharpening or softening the at least one portion of the image based on the determined feature indicator.

17. (Currently Amended) A machine-readable medium embodying a program of instructions for causing a machine to perform a method of removing image artifacts from a representation of an image, the program of instructions comprising instructions for:

(a) obtaining a pixel representation of the image;

(b) classifying each pixel in the image as a screen or non-screen pixel, wherein a screen pixel is defined as a pixel that is part of a predetermined periodic pattern;

(c) examining pixels in a predetermined surrounding area of each pixel to check the classification of that pixel as determined by the classifying instruction (b) by applying a two-dimensional mask that is divided into a plurality of quadrants, the center of the two-dimensional mask being common to each of the quadrants; and

(d) selectively applying a low pass filter to pixels in the image, such that, when the low pass filter is applied, a center of the low pass filter is selectively shifted relative to a current pixel based on <u>which of the plurality of quadrants in</u>

the two-dimensional mask contains screen pixels as determined by the result of the examining instruction (c).

18. (Previously Presented) The machine-readable medium of claim 17, wherein the classifying instruction (b) comprises applying a mask that is divided into overlapping areas with the center of the mask being common to each of the areas, the mask being applied such that it is centered on the pixel being classified to determine if the center pixel is part of the predetermined periodic pattern.

19. (Canceled)

20. (Previously Presented) The machine-readable medium of claim 17, wherein, in the execution of the examining instruction (c), the two-dimensional mask is applied such that it is centered on the pixel being checked.

21. (Canceled)

22. (Original) The machine-readable medium of claim 18, wherein the predetermined periodic pattern is a periodic line or dot pattern having a period of 2 or 3.

23. (Canceled)

24. (Original) The machine-readable medium of claim 17, further comprising instructions for:

    (f) determining a feature indicator for at least one portion of the image; and

    (g) adaptively sharpening or softening the at least one portion of the image based on the determined feature indicator.